

Vision: a platform for social/personal linked data

Axel Rauschmayer
University of Munich
hypergraphs.de

New crop of applications

- Web-enabled
- Collaborative
- Meta-data-based navigation (tags, facets)
- Many kinds of data
 - wiki pages, emails, images, ...

Vision: common platform for social linked data

- based on RDF
- services complementing RDF repositories

Benefits:

- Quickly prototype this kind of application
- Synergies (linking, reusing meta-data)

Requirements

- Integrate
 - Structured data (RDF)
 - Wiki content (→ semantic wikis)
 - External data: files, email, contacts, events, web pages, ...
- Multi-user access

Requirements (cont.)

Version control

- synchronization
 - offline use
 - backup
 - asynchronous collaboration
- versioning
 - personal use: history, undo
 - social use: solve edit conflicts, track changes

Two layers

- Repository layer
- Integration layer

Repository: graphs

- Authorization at graph level
- Each operation: specify a set of graphs for reading, a single graph for writing
 - One repository for all users
 - every user sees different graphs (e.g. personal preferences)
- Supported, e.g., by SPARQL and Sesame

Repository: long literals

- Needed for wikis.
- Store inline or refer to external file?
- Versioning: only record deltas.
- Full-text indexing for quick search.

Repository: other

- Distributed version control
 - Like Git or Mercurial, but for RDF
 - Synchronization is peer-to-peer

Integration layer

- Support for wiki content
- Integration of external content
- Versioning of files
 - Integration with RDF versioning
 - Reuse (for example) git?
- Versioning of other external data?

Hyena

- First attempt at a social/personal linked data platform
- Integrates RDF, wiki, files
- Synchronization between installations
- Web version (GWT-based) and desktop version (Eclipse-based)

More information

- These slides: <http://hypergraphs.de/> (soon)
- Requirements for social linked data
<http://2ality.blogspot.com/2009/07/requirements-rdf-and-social.html>
- Hyena: <http://hypergraphs.de/hyena/>